

TABLE 5-1. SUMMARY OF ARTIFACTS FROM SITE 5LR9949

PROVENIENCE		ARTIFACT CLASSES																TOTALS	% of Grand Total
		Nails	Cans	Wire	Cartridges	Hardware	Misc. Metal	Household Items	Personal Items	Transportation Items	Apparel & Accessories	Coinage	Bottle Glass	Window Glass	Ceramics	Faunal Remains	Floral Remains		
Collected Artifacts	Room 1	2				2										1		5	0.18
	Room 2	11				13	2	4	1		1		8	2	4			46	1.69
	Room 3	6		1		9	1		1		2		12	11	5	1		49	1.80
	Room 4	1				15			1		3		1	6				27	0.99
	Room 5	2				1												3	0.11
	Room 6	15				4					3		14		5	2		43	1.58
	Room 7	40			6	21	2	1	1		8		54	19	1	11	4	168	6.16
	East of Room 7																		
	Levels 7, 8			4		1		4	1				1	2				13	0.48
	150-160 East																		
	Level 3	6			2	2	2		1		1		16		4			34	1.25
	170-180 East																		
	Levels 1, 2		1		1	1							15	3				21	0.77
	Level 3					1							3					4	0.15
	190-200 East																		
	Level 1					1		1					4	2				8	0.29
	Level 2					1	5		1				4	1				12	0.44
	Level 3				1	1												2	0.07
	Level 5		1															1	0.04
	Level 6					1												1	0.04
	Trench 2																		
	Level 1	1		1		1	6		1		2		1	3		1	3	20	0.73
	Level 2	21	4	2	11	23	2	9	12		16		25	13	5	4	93	240	8.80
	Level 3															1		1	0.04
	Ash Layer	4					1										2	7	0.26
	Subtotals	109	6	8	21	98	21	19	20	0	36	0	158	62	24	21	102	705	25.84
Non-collected Artifacts	Room 1	6				11	100							1				118	4.33
	Room 2	39	100			75		20					70					304	11.14
	Room 3	32				71							104	74				281	10.30
	Room 4	6	5											32				43	1.58
	Room 5	11																11	0.40
	Room 6	182				1	6						30					219	8.03
	Room 7	505				28								197				730	26.76
	East of Room 7																	0	0.00
	150-160 East																		
	Level 2	7											1					8	0.29
	170-180 East																		
	Levels 1, 2					3												3	0.11
	190-200 East																		
	Level 1					1												1	0.04
	Level 3						3											3	0.11
	Level 4						1											1	0.04
	Trench 2	167		1		15	2						116					301	11.03
	Subtotals	955	105	1	0	205	112	20	0	0	0	0	321	304	0	0	0	2,023	74.16
TOTALS		1064	111	9	21	303	133	39	20	0	36	0	479	366	24	21	102	2,728	
% of Grand Total		39.00	4.07	0.33	0.77	11.11	4.88	1.43	0.73	0.00	1.32	0.00	17.56	13.42	0.88	0.77	3.74		100.00

Room 2 measures about 20 ft. by 15 ft. and has a 12-foot wide opening on the eastern side. Trench 2 crosses the northern half of the room, perpendicular to Trench 1. The floor is made of slabs of Dakota sandstone. Artifacts recovered from the room include bottle and window glass, ceramics, nails, cans, hardware, wood, paper, roofing materials, and coal (Table 5-1). A wooden plank was identified as Western red cedar (*Thuja plicata*). Diagnostic artifacts are absent.

Room 3 measures about 15 ft. by 15 ft. and its eastern wall is missing. The room may have had a wooden floor. Immediately above the floor is a thin layer of apparent roofing materials (tar paper, rafter fragments, sheet metal, and wooden shingles). Between this roof fall and the floor is a dense layer of artifacts, including bottle and window glass, ceramics, nails, hardware, leather, shoes, wood, wire, paper, coal, and a sawn vertebrae (transverse process) from a medium-sized mammal (Table 5-1). A prehistoric biface was also recovered from this artifact layer. No diagnostic artifacts were found.

Room 4 measures about 20 ft. by 15 ft. and its eastern wall is missing. The wall between Rooms 4 and 5 extends east for an additional 25 ft. The floor is evident as a haphazard placement of ¼” and ½” tongue-and-groove, wooden planks. The wood is identified as probably ponderosa pine (*Pinus ponderosa*). A hard wood knot may be from a southern pine, however. Artifacts are less abundant in this room (Table 5-1), consisting of bottle and window glass, nails, cans, hardware, buttons, roofing materials, linoleum tiles, miscellaneous metal, wood, wire, and a plastic toy. No diagnostic artifacts were found.

Room 5 measures 15 ft. by 10 ft. and has a 3-foot wide opening on the eastern side. The wall between Rooms 5 and 6 is missing. The interior is filled with wall fall and the floor type cannot be discerned. Artifacts are very sparse (Table 5-1), consisting mostly of nails and one piece of hardware. No diagnostic artifacts were found.

Room 6 measures about 15 ft. by 10 ft. and its eastern wall is missing. The room appears to have an earthen floor. Between the floor and a thick layer of reservoir sediments is a thin layer of artifacts (Table 5-1), including bottle glass, ceramics, nails, hardware, jewelry, buttons, a brick, miscellaneous metal, a burned pelvic or skull fragment from an unknown animal, and a bird furcula (“wishbone”). No diagnostic artifacts were found.

Room 7 measures about 30 ft. by 15 ft. and has a 6-foot opening on the eastern side. The floor is hard-packed earth. Immediately above the floor is a dense layer of charcoal, burned tongue and groove wooden planks, nails, bottle and window glass, ceramics, hardware, jewelry, buttons, and ceramic insulator. The wooden planks are probably made of Douglas fir (*Pseudotsuga menziesii*). Recovered floral remains include burned sour cherry (*Prunus cerasus*) or sweet cherry (*Prunus avium*) seeds. Also recovered were the burned end of a proximal rib of a medium-sized mammal and several bone fragments of a male bird. Several temporally diagnostic artifacts were recovered from this artifact layer, including a .22 long cartridge with a headstamp that dates ca. 1885-ca. 1950s or 1960s; three glass bottle bases with maker’s marks that respectively date to ca. 1908-1935 or 1938-1951, 1920-1951, and 1940-1951; and a fragment of manganese (purple) glass that dates ca. 1870s-1917. These dates overlap at ca. 1920-1934.

East of Room 7 is a short (about 16 ft.) segment of Trench 1 north of and outside Room 7. Three soil layers were defined in this section of the trench. *Layer I* (0-24 inches bpgs) is a reddish brown (2.5YR 4/4) silty clay. *Layer II* (24-29 inches bpgs) is a thin lense of very dark grayish brown (10YR 3/2) silty clay. *Layer III* (29-36 inches bpgs) a very dark brown (7.5YR 2.5/3)

TABLE 5-2. SUMMARY OF ATIFACTS FRPM SITE 5LR9961

ARTIFACT CLASS	PROVENIENCE																TOTALS	% of Grand Total
	Collected Artifacts								Non-collected Artifacts									
	Surface	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	subtotals	Surface	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	subtotals		
Nails	6	22	4		2			34	13	51	8	6	6	6		90	124	4.45
Cans*	1	2	3	4				10		30	30	300	100	100	100	660	670	24.03
Wire	7							7								0	7	0.25
Cartridges								0								0	0	0.00
Hardware	25	5	2	4	8	2	1	47	41							41	88	3.16
Misc. Metal	3	2	1		1			7	8							8	15	0.54
Household Items	25			2		4		31	18	10	1	2		10		41	72	2.58
Personal Items								0								0	0	0.00
Transportation Items	2		1					3		2						2	5	0.18
Apparel & Accessories	8	5	3	1	1	1		19	13							13	32	1.15
Coinage								0								0	0	0.00
Bottle Glass	141	19	2	12	2	71	1	248	967	191	55	41	38	7		1,299	1,547	55.49
Window Glass								0								0	0	0.00
Ceramics	56	10	12		1	2	4	85	67				22	13		102	187	6.71
Faunal Remains		3			32	6		41								0	41	1.47
Floral Remains								0								0	0	0.00
TOTALS	274	68	28	23	47	86	6	532	1,127	284	94	349	166	136	100	2,256	2,788	
% of Grand Total	9.83	2.44	1.00	0.82	1.69	3.08	0.22	19.08	40.42	10.19	3.37	12.52	5.95	4.88	3.59	80.92		100.00

Note: \*The Cans category consists of can fragments, not whole cans, and are estimates.

5.3 SITE 5LR9974

Site 5LR9974 is the former location of the Wathen Ranch and second Stout Post Office. It is found near the head of Inlet Bay (Figure 5-8).

5.3.1 Site Layout

A detailed map of the site area was created (Figure 5-9). The site was originally defined as three concentrations of stone slabs and bricks, labeled A, B, and C, which closely corresponded to the second location of the Stout Post Office on the Wathen Ranch in Inlet Bay. Shovel pits excavated in each of these concentrations produced artifacts and building materials, fairly conclusive evidence that the site contained buried cultural materials. While gathering the data for this map, additional building foundations were identified at the southern end of the site.

It was originally proposed to excavate two intersecting trenches on the site. Two additional trenches were also excavated based on surface and subsurface evidence. Six excavation units were established in discrete locations where buried cultural materials were likely to be found.



Figure 5-8. Overview of Site 5LR9974, Looking West. Excavation Trenches are Visible in Middle of Photo.

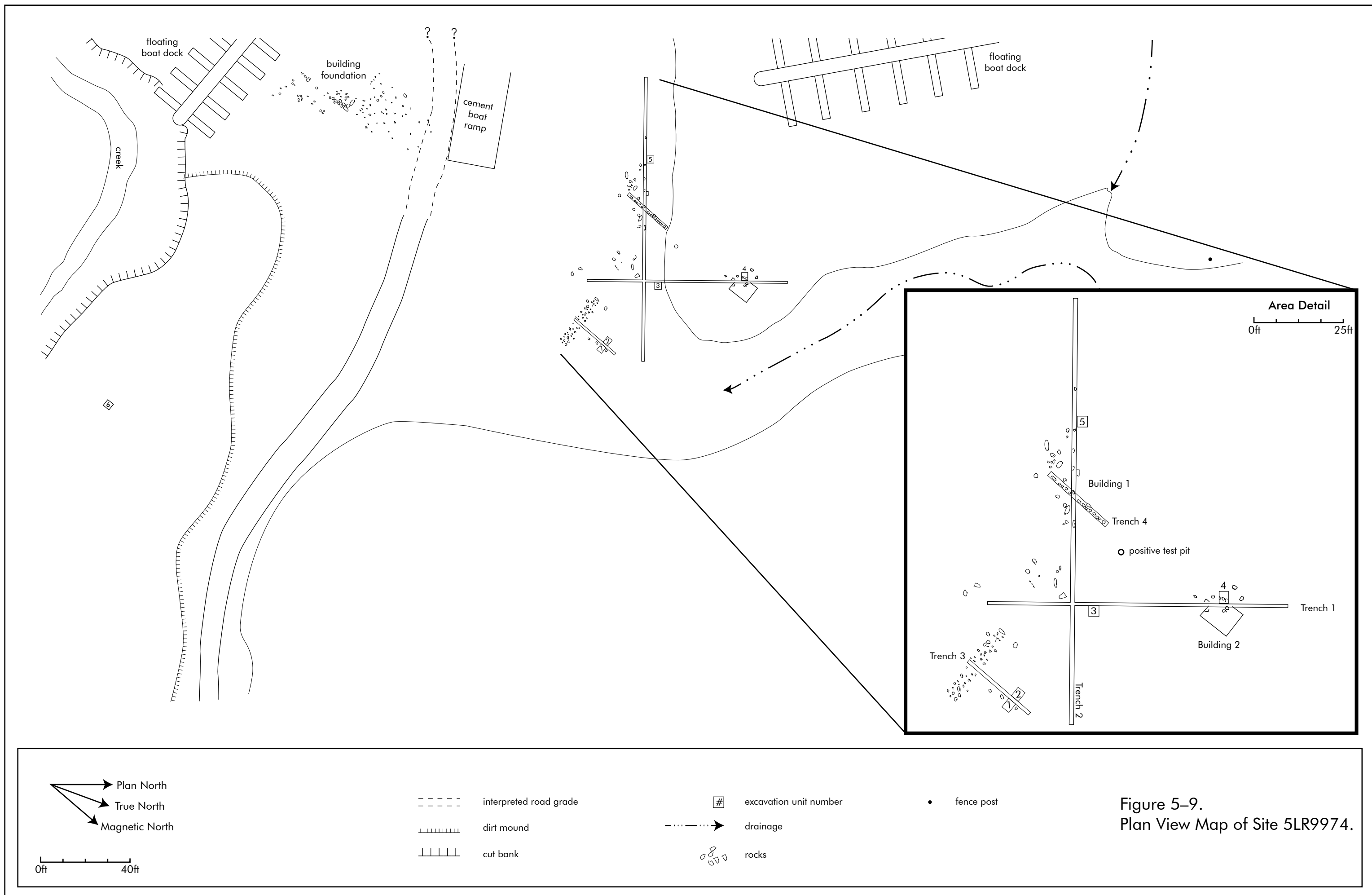


Figure 5–9.  
Plan View Map of Site 5LR9974.

5.3.2 Test Trenches

Four trenches were excavated in prescribed locations on the site. Each trench was 1 ft. wide but varied in length. Trench 1 is 90 ft. long and oriented N20°W (hereafter, Plan North). Trench 2 is 130 ft. long and oriented perpendicular to Trench 1 (i.e., about N70°E). Trench 3 is 25 ft. long, oriented N14°E, and placed so as to cross a shallow depression towards the eastern edge of the site. Trench 4 is also 25 ft. long and oriented N14°E, placed about 30 ft. west of the intersection of Trenches 1 and 2, where building stone and mortar were discovered in Trench 2. The results from each of the trenches are described below.

5.3.2.1 Trench 1

Trench 1 was laid out so as to intersect a cluster of building stone at the northern end of the site area. It was excavated to a depth of 4 inches. The soil is a moderately compacted, dark grayish brown (10YR 4/2) silt loam with occasional small roots of young cottonwood trees. Less than a dozen artifacts were recovered from the trench (Table 5-3). One of these artifacts is a .22 cartridge with a headstamp that dates ca. 1867-1912. E.U. 4 was laid out at the northern end of the trench where building stone was abundant. Another unit, E.U. 3, was placed near the intersection with Trench 2 where a slightly greater number of artifacts were found.

5.3.2.2 Trench 2

Trench 2 intersected at a right angle the southern end of Trench 1. It was excavated to a depth of 4 inches. The soil grades west to east from a compacted, dark grayish brown (10YR 4/2) clay loam, through a dark reddish brown (5YR 3/2) coarse sand, to a reddish brown (10YR 4/3) clay loam. Artifacts are slightly more abundant in this trench than in Trench 1 (Table 5-3). The shell of a coconut (*Cocos nucifera*) and a peach (*Prunus persica*) pit were recovered from the west half and east half of the trench, respectively. One excavation unit, E.U. 5, was set up towards the western end of the trench where patches of mortar were prevalent.

5.3.2.3 Trench 3

Trench 3 was placed across a shallow depression at the eastern edge of the site. This depression measures about 25 ft. long and 24-25 ft. wide. A low mound of dirt, about 5-6 ft. wide, forms the southern arm of this feature. It was conjectured that this is a cultural feature, perhaps a remnant of a structure. The trench was excavated to a depth of 8 inches. The soil varies in color and texture from a very dark gray (5YR 3/1) clay loam at the southern end of the trench, through a reddish brown (5YR 4/3) silt loam, to a reddish brown (5YR 4/3) coarse sand at the northern end. Artifacts are much more abundant in this trench, comprising slightly more than 20 percent of the total number of artifacts recovered from the site (Table 5-3). One of the recovered artifacts is a piece of manganese (purple) bottle glass, which dates ca. 1870s-1917. Floral remains include a peach (*Prunus persica*) pit and an apricot (*Prunus armeniaca*) nut shell or seed. Several animal bones were also recovered, including a carpal/tarsal bone from a medium mammal, several unknown burned bones from small to large mammals, and a rib from a small- to medium-sized bird. Based upon these results, two excavation units, E.U. 1 and E.U. 2, were established on either side of the trench at the northern end.

TABLE 5-3. SUMMARY OF ARTIFACTS FROM SITE 5LR9974

PROVENIENCE		ARTIFACT CLASSES															TOTALS	% of Grand Total	
		Nails	Cans	Wire	Cartridges	Hardware	Misc. Metal	Household Items	Personal Items	Transportation Items	Apparel & Accessories	Coinage	Bottle Glass	Window Glass	Ceramics	Faunal Remains			Floral Remains
Collected Artifacts	Trench 1 South 1/2					1		2										3	0.21
	Trench 1 North 1/2	1			1						1		5					8	0.57
	Trench 2 West 1/2	2				3	4		1		4		4	1			1	20	1.43
	Trench 2 East 1/2	3				1		1	6		1		9	2			1	24	1.71
	Trench 3																		
	Level 1	127		2		22	9	14	1		1		41	15	4	11	1	248	17.71
	Level 2	6				10	1	2					9				1	29	2.07
	Trench 4	5				16	1				1			7		3		33	2.36
	Unit 1																		
	Surface	1																1	0.07
	Level 1	301		2	1	25	3	3	2		5		64	30	5	17	4	462	33.00
	Level 2	139			2	4	11	3			4	1	29		1		3	197	14.07
	Level 3	66				34					4		19		1	6		130	9.29
	Unit 2																		
	Level 1	29			2	1	8				1			1	1	1	3	47	3.36
	Unit 3																		
	Surface												1					1	0.07
	Level 1															1	2	3	0.21
	Level 2	1							1	2			8					12	0.86
	Unit 4																		
	Level 1						6						1					7	0.50
	Level 2	1					1											2	0.14
	Level 3	13		8		28		6			1		61			4		121	8.64
	North of Unit					1	1				1		1					4	0.29
	Outside Unit Along Wall	5		2		11	1	1			1			1			4	26	1.86
	Unit 5																		
	Level 1					1												1	0.07
	Level 2	1																1	0.07
	Unit 6																		
	Level 9													1				1	0.07
	Level 10													1	1			2	0.14
	Level 11						1											1	0.07
	Test Pit					7												7	0.50
	Subtotals	701	0	14	6	165	47	33	12	2	24	0	252	59	13	43	20	1,391	99.36
Non-collected Artifacts	Unit 6																		
	Level 2							1									1	0.07	
	Level 3					2		3									5	0.36	
	Level 4								1								1	0.07	
	Level 8					1		1									2	0.14	
	Subtotals	0	0	0	0	3	0	5	1	0	0	0	0	0	0	0	0	9	0.64
TOTALS		701	0	14	6	168	47	38	13	2	24	0	252	59	13	43	20	1,400	
% of Grand Total		50.07	0.00	1.00	0.43	12.00	3.36	2.71	0.93	0.14	1.71	0.00	18.00	4.21	0.93	3.07	1.43		100.00

5.3.2.4 Trench 4

Trench 4 was placed where building stones and mortar were abundant along Trench 2, west of its intersection with Trench 1. A building foundation (Structure 1) discovered in the trench is described further below. A relatively small number of artifacts were recovered from the trench (Table 5-3). The artifact assemblage includes the femurs and a tibia from a domestic cat.

5.3.3 Excavation Units

Six excavation units (E.U.), each measuring 3 ft. by 3 ft., were established where the potential for subsurface materials was judged to be promising. Five of the E.U.’s were placed next to the test trenches. E.U. 6 was located at the southeastern corner of the site where other remnants of the site might be buried. The results from each E.U. are described below.

5.3.3.1 Excavation Unit 1

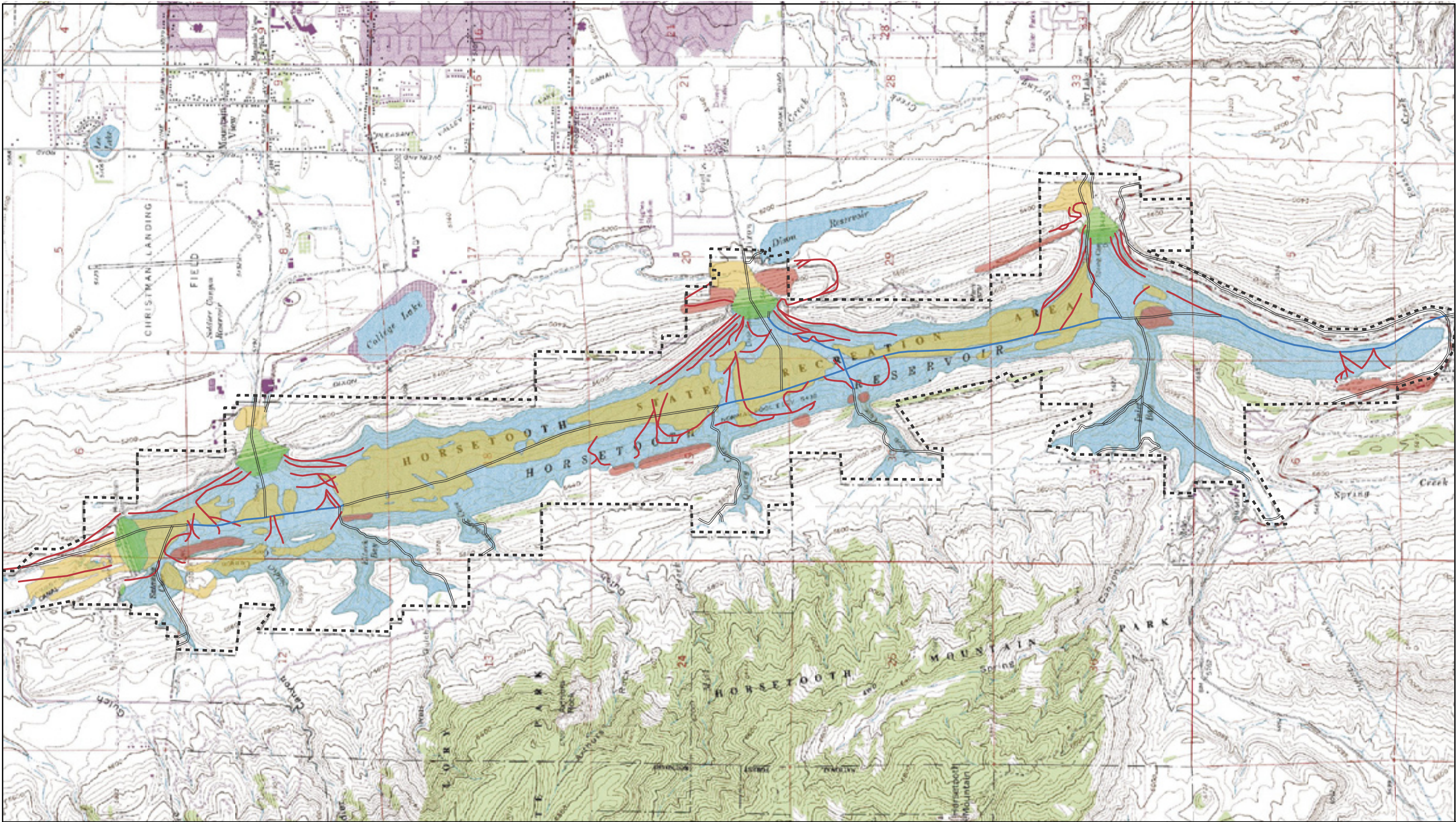
E.U. 1 was placed on the eastern side of the northern end of Trench 3 to explore further a concentration of artifacts found in this location. The unit was excavated to a depth of 16 inches. Figures 5-10 to 5-13 combine stratigraphic profiles for the northern end of Trench 3 and three walls of E.U. 1. These profiles reveal two soil zones of mottled yellowish brown (10YR 5/6) silt and charcoal (Layer 2) and mottled dark yellowish brown (10YR 4/4) silt with gray (10YR 6/1) ash, both moderately compacted, which are interpreted to be low mounds of cultural debris. Above these cultural horizons are natural layers of loose reddish brown (5YR4/3) coarse sand, moderately compacted dark reddish brown (5YR 3/2) clay, moderately compacted red (2.5YR 5/6) clay, and compacted brown (7.5YR 4/3) silt. Below these horizons are alternating natural layers of loose reddish brown (5YR 5/4 and 5YR 4/3) coarse and fine sand and moderately compacted dark reddish brown (5YR 3/2) clay.

Artifacts are abundant (56 percent of the total) in these two layers (Table 5-3). Nearly two-thirds of the artifacts are nails, with bottle and window glass, hardware, and faunal remains comprising nearly all of the remaining artifacts. Animal bones that were recovered include a humerus, ribs, fibula, and other long bone fragments from small, medium, and large mammals. Also present are long bone fragments of a medium-sized bird. Many unidentifiable bone fragments, of which some have been burned, were also recovered. Six peach (*Prunus persica*) pits and a pumpkin or squash (*Cucurbita* sp.) seed were also recovered. Temporally diagnostic artifacts include fragments of manganese (purple) glass (ca. 1870s-1917), a .22 cartridge (1867-1912), and two 30 Government ‘06 cartridges (1917).

5.3.3.2 Excavation Unit 2

E.U. 2 was placed on the western side of the northern end of Trench 3, opposite E.U. 1. It was excavated to a depth of 4 inches. The soil is described as a lightly compacted dark reddish brown (5YR 2.5/2) silty loam. A small number of artifacts were recovered from this unit (Table 5-3), mostly nails. Recovered faunal remains include a burned long bone fragment of a medium mammal. One 30/06 Government cartridge (1917) was also recovered. Further excavations were discontinued in this unit after it became apparent that adjacent E.U. 1 would yield more promising results. Floral remains include two peach (*Prunus persica*) pits and a plum (*Prunus* sp.) pit.





Explanation	
BOR Boundary	Construction Areas
Pre-Construction Roads	Dams
Construction Roads	Rock Quarries
Pre-Existing Roads	Soil/Borrow Areas
Road Grades/Haul Roads	Lake-Bottom Contours

Date: September 15, 2003

Figure 5-20.  
Construction Features

Data Sources:  
Construction features collected from 1950 post-construction aerial photography.  
Pre-construction roads collected from 1950 post-construction aerial photography and 1941 pre-construction aerial photography.  
Lake-bottom topography collected from "The Horsetooth Reservoir Map Displaying Lake-Bottom Topography", HydroS urveys, Inc., (1983).  
Topographic data from USGS quads Fort Collins (1984), Horsetooth Reservoir (1971), Masonville (1984), and Loveland (1984).



The shovel excavator selectively chose cleaner rock piles and a bulldozer was used to separate out the cleaner waste piles from the unusable ones (McClure 1949: 46). About 88,000 cubic yards of rock fines was used from these waste piles (McClure 1949: 47). Sites 5LR1413 and 5LR1416 may be the historic quarry sites where the rock fines were excavated. They are located only one-half to one mile away from the dam site, whereas the construction report states a distance of one and a half miles to the old quarry sites. These sites contain various quarry cuts and waste rock piles. Each site also has at least one road bed leading to the quarry. There is also a road bed, 5LR759 Feature 64, which leads to the north abutment of the dam. The road may have been used to haul the impervious and semi-pervious fill from the borrow areas in the middle of the valley.

The rock fill for the upstream portion of the dam was obtained from newly opened quarries along the west side of the valley. The Lyons sandstone was excavated from two large quarries at the mouth of Quarry Cove. The Final Construction Report for Dixon Canyon Dam gives specific locations for the quarries based on the main borrow area survey stations (Field and Hill 1949: 47). Three sites at the mouth of Quarry Cove appear to be remnants of these quarries. Site 5LR1335, contains several quarry cuts, many waste piles, one cinder block and one sandstone building foundation, and two connected road beds. Site 5LR1336, is a long quarry cut and waste piles extending parallel to the hogback. Site 5LR9958, has two road beds leading into quarry cove and appear to be connecting to the bottom of the hogback where the quarry site 5LR1336 is located.

The rock fines material for Dixon dam was also taken from historic quarry tailings piles and pits located on the west side of the valley. The material was excavated until there was no longer any suitable material left (Field and Hill 1949: 52). Site 5LR1334, is a small sandstone quarry with no associated features or artifacts. There is a thin layer of sandstone tailings at this site. Site 5LR1426, is a large site containing quarry cuts, building foundations, waste piles, retaining walls, road beds, dirt platforms, trenches, and a cistern. The site was originally used historically but the tailings produced at this site may have been utilized for Dixon Dam. Site 5LR1427, is adjacent to site 5LR1426 and has similar features, such as quarry cuts, waste piles, and road beds. Two other sites that may have been utilized for their sandstone waste piles are 5LR9954 and 5LR9955. They are further south then the previously mentioned sites, being closer to Spring Canyon Dam, but contain features that may represent construction activity. Both sites contain a large number of sandstone rock piles. Site 5LR9955 has 16 sandstone piles and Site 5LR9954 has nine rock piles. These rock piles are closer to the middle of the valley, then they are to the sandstone quarry cuts along the western hogback. Many of the piles also had steel cable within the piles, which may be from the cable operated excavation equipment used by the dam construction crews. These piles could also be remnants of stone buildings that were demolished during reservoir construction.

The rock embankment material for Soldier Canyon Dam was obtained from a newly opened quarry on the west side of the valley just north of the dam site (Thomas 1949: 25). This corresponds to Site 5LR1343, a large sandstone quarry with associated road beds (Figure 5-21). The rock fines material was excavated from another quarry, opened on the west side just to the south of the dam (Thomas 1949: 26). This quarry corresponds to Site 5LR759 Feature 9 and may include portions of Site 5LR9950. Site 5LR759 Feature 9, is a large sandstone quarry. Site 5LR9950 is a building foundation and several quarry cuts. The building is on the south end of the site, while the north end contains several quarry cuts and waste piles. A road bed, Site